Thesis

The impacts of video teaching on the music cognition of children

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Abstract:

The thesis is conducted with the purpose to investigate the influence of video teaching in music cognition of learners at the early ages. 150 participants from various music training organizations including schools, centers and tutors in Hanoi have been invited to involve in the questionnaires and interviews.

The outcome has shown that although video is not a panacea for teaching, video is an integral tool to increases students' retention of information. The reason for that is, the student is developing the visual-spatial skills, which help them to interact with media.

Keywords:	**Teaching music with video; visual applications in music teaching; music cognition development with visual applications**
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FOREWORD

Music is nowadays becoming more and more important in teaching and learning system. Along with the increasing role of music, advanced technologies are also widely applied, which embark on the success of the music education. The theoretical development of music

education was reviewed by a range of previous studies. In addition, the research conducted in the training center in Hanoi resulted in some findings about the implementation of technologies in music education, especially the media effects and the consideration of approaches. Moreover, further attention should be paid on the potential problems related to the video integration when applying these methods.

The main research of this thesis is to weight the impacts of using video during music class on the cognition of this type of media in youth in their early ages from 6 - 10 in various music training centers in Hanoi, Vietnam. Consequently, the main research question of the thesis: How does video teaching on technological platform affect the music cognition of the children?

To answer this question, there are several sub questions are listed: (1) how video is incorporated in the teaching and learning of music?; (2) how do video application affect the traditional teaching and learning of music for young children?; (3) which music approach is better for young children?; and (4) what are problems related to the integration of video?

All the research sub questions are answered and the following study conclusions prove this:

Firstly, technologies used in music classes in music training centers in Hanoi are music education software, MIDI, the Internet, music hardware, and multimedia labs. Music education software is used with the highest frequency, following by MIDI, the internet, music hardware and multimedia labs. Video is incorporated in teaching and learning of music in training centers in Hanoi. Hence, the first research question is answered.

Secondly, there is a positive effect of media in creating the students' interest in learning and in increasing learning results of the students. Young students in music training centers in Hanoi are more interesting in participating in classes using media technologies. The effect of visualization, videos, interesting content and high interaction effect are the most differences that help students to become more interesting in the classes. Thus, the second research question is answered.

Thirdly, multimedia labs and internet are better approaches for teaching students because the two approaches increase learning results and skills like team-work, social development,

creativity, and self-expression. Therefore, the third research question is answered.

Lastly, although the development of using video as a major approach in learning and teaching music to young students in music training centers in Hanoi, teachers of the centers confirm that the problems related to the integration of video are distraction in learning process, the time-consuming in preparation, the video quality, sound and animation and picture and effects. Parents of the young students also consider about the integration of videos in learning and teaching music, mainly, the content quality, relevant subject, distraction in learning, the effectiveness of this approach and effects to health. Hence, the last research question is answered.

1 INTRODUCTION

When it comes to music, it truly plays an integral part in shaping children's cognitive development, judging from the fact that there is actual proof of a mutual connection between one's musical conception and his future creativity (Ross, 2007). Developing individual musical talents requires the recognition of social factors when it comes to building up musical aptitude for kids. With the help of a suitable upbringing and inborn characteristics of children, they can quickly accumulate music knowledge by expressing their true artistic potential at the age of around 9, before slowing down the learning process to the normal speed. Judging from that, music education during the very first years of preschool is extremely crucial. Having flair for music requires a child to be competent in terms of getting acquainted with cognitive, motivational, social and cultural factors as well as his own personality traits, and this can be achieved through a well-round coordination of listening, producing, understanding and experiencing with music stimulators. As the children keep growing up and learning new knowledge, their musical skills would no doubt be improved overtime in accordance with the development of natural neuropsychological functions. For music abilities, they need to be individually characterized since they have a close relationship with a child's general growth. Based on the amount of time a child spends in contact with music, his basic ideas of artistry develop, which is a beneficial step with regard to the corresponding age. To further enhance kids' promising musical talents, we can always rely on the prevention of music underperformance while applying solutions which encourage children to proactively produce their own melodic versions. This thesis is conducted with the motivation to learn about the impact of video teaching based on technological platform affect the music cognition of the children.

1.1 Research motivation

It is undeniable that music influences both physical and intellectual development of children.

Firstly, music helps to promote the brain development, particularly verbal working skills of the children. Notorn *et al* (2005) indicate that although music does not have any remarkable

effects on children's perception, their brain or visual –spatial indicator, music perceptual skills are strongly correlated with both non-verbal reasoning, grammatical and phonics knowledge of young learners. Moreno *et al* (2009) also supports these arguments by indicating various studies emphasizing the importance of music in developing reading and speaking skills of the children. Research of Gromko (2005) records comparatively better performance in speaking related skills in the children having music teaching than those who do not. Franklin *et al* (2008) also state that children experiencing music learning have greater verbal working memory span than the others.

In addition to that, despite the fact that strong debates have been raised about the impacts of music, particularly Mozart Effect, on the cognition of children, music is believed to enormously support the child cognition development by many reliable researches. Rauscher *et al* (1993) research the performance of students with music training and those who don't and recognize significant variance in these two groups. In particular, student with music training tends to have higher score than the others. Norton *et al* (2005) shows that musical practice has impact on the development of the brain among children despites the difference in brain structures. Music also helps to develop linguistic skills by sharpening them through various musical tasks including rhythm, melogy, and chord progression (Anvari *et al,* 2002). Milovanov *et al* (2007) believe that the dominance of the side of brain which processing musical and linguistic can be influenced by musical expertise.Forgeard (2008) raised the idea about instrument training can improve the non-verbal reasoning skills as well as the vocabulary.

As a consequence, Southgate and Roscigno (2009) conclude in their research that the impact of music on the growth of children can lead to higher achievement in academic results such as math and reading scores. Moreover, music is proven to improve the memory of practitioners in both verbal and non-verbal areas (Ho *et al*, 2003; Orsmond and Miller, 1999)

The advantage of music practice on children leads to the tendency among parents to create opportunities for their kids access and learn music at very early age (Franklin, et al., 2008). Besides the traditional approach to music, the development of technology has brought back many improvements to teaching and learning music. Contemporary music training has incorporated a lot of technological application in music class. The question has been whether

the technology really can improve the music cognition of the children? Debates have ben evolved around the choice of traditional teaching method and contemporary teaching method with digital supports. This thesis is going to investigate the impacts of video taught on technological platform on the child's cognition of music in various training centers in Vietnam to respond to the above-mentioned problem about the impact of video teaching on children cognition development about music.

1.2 Background

Using video in education have been proven with many benefits in various research recently, Shepard and Cooper (1982) and Mayer and Gallini (1990) illustrated the relation between visual clues, memory-storing and accessing of new knowledge (Institute of Learning and Teaching Innovation, 2019). Allam (2006) wrote that, the the test that using a set of moving pictures and sound to illustrate a topic can enables leaners to receive a set of transferable skills which allow them to build visual perceptions including collaborative working, research skills, problem solving, technology and organizational skills (Bijnens,2005).

As a part of the learning activities, visual media such as video can be seen as a tool to give the detail instruction for the learners since they can repeat it various times which lead to the better understanding about the complex procedure (Institute of Learning and Teaching Innovation, 2019). In the addition, "active viewing" between the group of learners can be promoted by the interactive meeting and viewing features provided by web-based media players (Galbraith, 2004).

Willmot et al (2012) illustrated that students' reports under digital video form can inspire the learners in the learning process through:

- Motivation development
- Providing better learning experience
- Better results through higher scores
- Better learning opportunities for students

- Development of self-learning skills
- Growing and improving learning and teamwork skills
- Chance to gain and practice skills relating to job interview
- Gain necessary knowledge and experience which can be applied in the future
- Development opportunities for employees.

The positive points of using video to providing authentic studying chance for learners has been proved by Kearney and colleagues (Kearney and Campbell 2010; Kearney and Schuck, 2006) and the way web-based videos support the compliance which came from perspective of researches.

1.3 Research objectives and research questions

The objective of this research is to analyze the relationship between using video in music class on the cognition of music in children in their early ages from 6 - 10 in various training centers in Hanoi, Vietnam. Consequently, the main research question of this thesis is: How does video teaching on technological platform affect the music cognition of the children?

To solve the above question, there are several sub-questions that have been used.

- ✔ How video is incorporated in the music learning process?
- ✔ How do the applications of video affect the traditional teaching and learning music for young children?
- ✔ Which music approach is better for young children: the traditional way of teaching or teaching with video integration?
- ✔ What are problems related to the integration of video to the teaching and learning music?

1.4 Limitations

This research is limited to the training centers in Hanoi, Vietnam. The data for this research is collected through the direct interview with students, teachers and parents in some schools and training centers in Hanoi. The questions will focus on the experiences with video teaching in music class and how they evaluate the performance of the kids with such appliances. However, because of the shortage of time and other type of resource, the interviews are only focused on schools and training centers in Hanoi, Vietnam; the sample may be only representative for this area.

1.5 Method

I use desk research combined with an online survey as the methods to resolve the research questions. The research random sampling is used and got information from individuals with specific knowledge about the music field. The source of interviewees are staffs and learners who are participating in music training center and primary schools located in Hanoi. The sample size of the interview is 150 answers and all of them would be used for gathering information. All of the questionnaires are closed end to allocate information into parameters which illustrate the impact of visual media to learning activities of the learners in the capital of Vietnam. The percentage distribution is allocated and presented in the several types of charts and graphs.

The data of this research is come from two sources: primary and secondary research. The primary research data is from the questionnaire, individual and group interviews to find the answers for specific problems. The secondary research source is come from the previous research with the appropriate information and publicly available (Business Case Studies , 2019). This source includes published research by universities, government or other authority office. In fact, for a part of researchers, the primary research through interactive interviews are overused to make the comparison and conclude the results while the secondary research data is under-used. The imbalance between the two types of research lead to the waste of a huge reliable data and resources which are easily to access through library, internet or other reaching tools which are important to ensure the accountability of the research results and the achievement of research objectives (Smith, 2010).

1.5.1 Research design

Research philosophy – Positivism philosophy

The research uses positivism philosophy because the researcher emphasizes the use of objective points of view for analyzing what technologies are common among music classes in Hanoi, analyzing how the media affects the traditional teaching and learning of music for young children, evaluating which music education approach is better for young children, and analyzing what problems are related to the integration of video (Saunders et al., 2018). Furthermore, since the positivism philosophy is applied, it allows the researchers to law-like research findings that music training centers in Hanoi can use in their operational practices in the future (Bryman and Bell, 2007).

Research approach – deductive approach

This study uses deductive approach because the researcher examines current theory related to music education in the case of music training centers in Hanoi. Indeed, the researcher initially reviews the current theory related to music education and examines the theory in the context of music training centers in Hanoi, Vietnam (Saunders et al., 2018). Moreover, the deductive approach is important for the researcher to reduce a large amount of research time by utilizing available theory about music education rather than developing new theory about music education. With the limited research time, the deductive approach is suitable for the research (Biggam, 2008).

Study strategy – survey strategy

Survey strategy is applied in the study because the researcher focuses on gathering data from many participants (learners and teachers of music training centers in Hanoi, Vietnam) (Saunders et al., 2018). In addition, survey strategy is suitable with deductive approach and positivism philosophy to examine reasons behind correlations between elements. With the combination of the survey strategy with the deductive approach and philosophy of positivism, the research can evaluate the relationship between the media and the traditional teaching and

learning of music for young children in Hanoi and can explain reasons behind the relationship (Bajpai, 2011).

Study method – Quantitative method

The quantitative method which is included numerical data has been used to locate all the information for the research objectives. Indeed, the research uses numerical data and graphs to evaluate what technologies are common among music classes in Hanoi, to analyze how the media affects the traditional teaching and learning of music for young children, to evaluate which music education approach is better for young children, and to analyze what problems are related to the integration of video. Moreover, the quantitative data are analyzed through descriptive analysis method (Saunders et al., 2012).

1.5.2 Data collection

Secondary source data

This type of data is come from secondary sources including journal articles, websites, reports, books and so on. The research activity through public resources such as journals and book as well as interactives interview.

The secondary data through journal article is one of the most effective and reliable way to allocate the information which lead to a theoretical background for the study. Firstly, a range of previous researches by other authors with different context and purpose. From that, the author can have an overview about available research methods, their pros and cons and decide to choose the appropriate method for the study. In addition, these sources provide the perspective and views of other authors about the topics, so the writer can find the gaps and build the study in a critical criterion with a contemporary issue. Furthermore, a better description information could be concluded from the paper research process (Austin & Sutton, 2015).

Primary data

Primary data is collected through interviews with teachers, students and parents in chosen training centers in Hanoi. The process is conducted to gain the view of management and staffs working in the field about the issues. A large number of questions are open-ended which allows the participations to express the opinions freely. To attract the interviewees, emails about the study have been sent to them and asked whether they could involve in the interview (Austin & Sutton, 2015). To access the targeted interviewees, the author contacted the administration department of the center and schools. Questionnaire will be used to gather primary data from learners and teachers of music training centers in Hanoi City. There are three main reasons for using questionnaire in the study. Firstly, questionnaire allows the researcher to reach a large number of respondents to minimize data collection time and costs (Cargan, 2007). Secondly, from the given options of a question, the author can allocated the information into group and reason easily (Saunders et al., 2018). In addition, questionnaire allows the writer to gain numerical data to measure the impact of the media on the traditional knowledge gaining process of music for young children in Hanoi (Biggam, 2008).

The channel to delivery the survey is online channel. (Wright, 2005) illustrates the advantage of using online channel as a method to conduct survey. It provides the benefit of accessing to a specific population, time and cost effective (Wright, 2005). From this author, there are a wide range of reason for keeping the traditional research method such as interactive interviews through group and individual. However, the disadvantage of geographic concentration or lack of good mental and physical condition (Wright, 2005) can lead to the low rate of interactive communication and face-to-face research. These disadvantages can be solved by online research and lead the author to a wider range of interviewees. As an example, during the working process of this research, there are the involvement of different group including teachers, parents and students who come from different locations. This method also helps the author to save money, time and other resources (Austin & Sutton, 2015).

The study uses a systematic sampling technique (a random sampling technique) because it increases data generalization and study result generalization (Saunders et al., 2018). A

questionnaire-based survey strategy should have a sample size of 150-400 people (Thompson, 2013). For the study, the researcher decides to collect data from 150 subjects.

1.5.3 Data analysis

After being collected, data will be processed and presented in the most comprehensive ways including graphs, charts, and tables.

Descriptive analysis method from Excel Microsoft will be applied to evaluate what technologies are common among music classes in Hanoi, analyze how the media affects the traditional teaching and learning of music for young children, evaluate which music education approach is better for young children, and analyze what problems are related to the integration of video. Graphs are used to describe the study findings.

1.5.4 Research ethics

The researcher follows all requirements about ethics in study of the University to ensure value and reliability of the study. The researcher informs all research purposes to respondents and ensures that all the respondents are voluntary people. The researcher gains their consent before gathering data from them. The writer only uses the available data for analyzing and explaining study issues of the project and stores the data confidentially and carefully. The researcher will delete the data within 5 months after the researcher finishes the project.

1.5.5 Limitations of used methodology

There are several limitations of the methodology. Firstly, the deductive approach only helps the researcher to examine current theory rather than offering other explanations and new theory for stated problems (Saunders et al., 2018). Secondly, the quantitative method only ensures reliability level of study findings but it does not gain rich study findings (Bryman and Bell, 2007). Lastly, the study only includes data from 150 young students in music training centers in Hanoi and 150 teachers of the music training centers and the sample size is average.

1.6 Thesis structure

Below is the structure of the thesis:

Chapter 1: Introduction

In this chapter, the background and motivation to choose the topic of the author would be presented

Chapter 2: Literature review

All of the previous research works would be reviewed in this chapter with the purpose to identify the division carried by current researches and build a conceptual framework for question using in data collection process.

Chapter 3: Findings

From all the information gathered in chapter 3, the comparison and contract between the statistical outcome of this research with the previous outcomes to make the distribution of the research.

Chapter 5: Conclusion and implications

From all the information and critical analysis from previous chapter, a practical recommendation for the problem illustrated in this research could be created.

2 LITERATURE REVIEW

In this chapter, a theoretical background of research matters would be built up. In particular, it will review previous research about the roles of music to the development of young learners and how technology is integrated into the learning and studying of the teachers and learners. Based on such literature review, the writer can identify the gaps that can be focused as well as methodology to apply in the study.

2.1 The importance of music education to the musical development of young learners

2.1.1 The musical development of young learners

When it comes to music, it truly plays an integral part in shaping children's cognitive development, judging from the fact that there is actual proof of a mutual connection between one's musical conception and his future creativity. To shed further light onto this topic, there is no better way than adopting the Piaget's theory of cognitive development with a strong focus on music perception. Children's learning, generally speaking, can be easily simplified as an array of acquiring continuous skills and experiences as time goes by, meaning that at each single stage of life, a child might be able to obtain a new idea or concept before turning it into his own value. Therefore, in terms of music perception, a viable relationship between musical sounds and behavioral thinking can be built throughout a child's cognitive development.

During the first year after birth, a typical infant can differentiate whether there is a shift in the shape of a melody or not, before heading towards making pitches. From 1 year to 2 years of age, the toddler now can react to a musical sound by trying to reproducing it in his own method. That includes singing, with more noticeable ups and downs in flows and rhythms. After another year, he obtains a better conception of melody shapes, thus resulting in his replicating a new audio version of his own, as similar to the original sound as possible. This also takes place and starts developing to a higher level when the child reaches the stage between 3 and 4 years of age, despite a decrease in the ability to control pitches and to

maintain the tonic stability. From this point onwards, absolute musical hearing has reached its optimal level of development. From 4 to 5, a kid can tell the difference among musical registers before attempting to create simple melodic features. Moving onto the next year, the process of his cognitive development should not just stop at purely distinguishing melodies, but rather categorizing them based on a hierarchy of musical loudness and rhythm patterns. This creates an important foundation for children's musical perception, as at the age of 6 to 7, they would have the capability of reciting songs with better accuracy while learning the principles of tonal structure in music education (Veisson & Veispak 2005).

One thing to remember is that all of those above-mentioned observations are generalized since the study was conducted on ordinary children; i.e. children with no special stimulation with music. To be safe, musical development should be treated as a personal and unanticipated process since it differs from person to person; therefore, any findings related to this matter should also be regarded with utmost concern of authenticity. Nonetheless, there are still general patterns that can be noticed about children's musical conception and development, especially those who are attending preschool education.

Most importantly, children have a tendency to blend different pitches into motives, rather than separating them. At the early stage of sound perception, tones and timbres both play an indispensable role in a child's cognitive thinking. Then, within a suitable upbringing, kids can adapt to musical motives and turn them into preliminary steps of the process of learning singing skills. When a child at a certain stage is capable of mimicking auditory signals and creating new versions of sound models, he inevitably reaches the full potential of his musical development (Päts 1989, 21). At the age of 5, kids will catch up with adults when it comes to pitch hearing, proved by the fact that many of them have the ability to intone common tunes with high accuracy .W. Dowling stresses his finding that, the more often parents encourage their children by saying something like "you-will-be-doing-fine", the more precise their intonation will be during the singing (1988, 1994).

By being absorbed in an environment full of musical factors, a child can obtain a sense of tonality at the age of five to six through making connections between sounds, or between singular audio signals and the main tone. This is the focal point which forms the foundation of a melody, looping around the core tone from the beginning to the end. After establishing

connections among key musical features, the child now can shift his attention to the very basic ideas behind musical scales – ranging from pentatonic to major and minor scales. According to the study conducted by D. Hargreaves and M. Zimmer- man's (1992), when a child reaches the age of 8, his conception of melody would become relatively stable, thus giving room for improvement into a full sense of tonality.

The perception of musical tones can be achieved overtime as part of a child's instinct, but it is not the same case as with melody learning, since it requires practical experience with scales. During cognitive processing, brains would function as a database for storing different auditory signals, including sounds, tunes as well as their connections. When reaching the age of 4 or 5, children will develop a clear conception of musical tones. Before this stage, receiving and understanding a melodic signal is of utmost importance for kids, since acquiring this skill will help them learn music faster through absorbing and integrating it with hearing and analyzing protocol. From here, imaginary melody shapes will be established to put main pitches in the exact order (Dowling & Harwood 1986). To clarify further, there are two underlying contributors that help constitute the sense of melody: the tonal structure and shape of the melody (Schmucler 2009), followed by the ability to listen to timbre. During kindergarten age, kids are capable of telling various instruments apart from each other with a high percentage of success, but things would not go as smoothly as that when it comes to nearly identical things (for example flute versus clarinet). According to R. Shuter-Dyson, timbre is an essential part of a highly improved sense of hearing, thus spurring the promising aptitude for musical talents.

One of the things that kindergarten kids usually miss a chance to be equipped with should be harmonic hearing, since it requires them to learn how to split up their attentiveness. On a small scale, as long as they can color every tone played on the background music, kids will soon find out the way to organize sounds in a vertical order. When it comes to harmony sensation, children will acquire and maintain it throughout the years of growing up. Nevertheless, they show quicker adaptation to musical rhythms even at the beginning of infancy. Responses can come in a variety of forms, including the entire body shaking and movements. This explains why the sense of rhythm is so integral to children that they need to adopt this skill during kindergarten education. However, it is limited in a sensual form only,

instead of belonging to the conscious mind. In most cases it actually comes from a child's intuition which was inherited at birth. The process of continuously striving for the roundness and wholeness of form can be quite conspicuous (Päts 1989). As a result of musical stimulation, a child can begin developing a sense of form to a certain degree.

No matter how well equipped they are with music comprehension skills (including the ability to distinguish between tones, rhythms or to create imaginary musical models), at kindergarten age, kids can still enjoy their interaction experiences with music, mostly on the grounds of emotions. Starting from the age of 3, a child can have a clear perception of sorrow or happiness in which melodies of songs are based on. Reaching 4 years of age, he can even interpret the true feelings that are expressed by music, such as happiness, joy, disappointment, frustration, and scare (Boone & Cunningham 2001). Then, by combining this understanding of melody and beat track with musical skills obtained from cognitive development, i.e. sense of rhythm and tonality, we can develop a basic foundation of music enjoyment. This process of learning would continue even till adulthood, thus resulting in a great amount of knowledge in terms of musical comprehension.

During the time span from 1900 till 1950, G. Révész believed that the state of being unmusical in human being can be derived from 2 different reasons: inborn factors and nervous factors (such as the inability to recognize tones). To distinguish them from each other, one can safely rely on the fact that some people may not be able to capture full sense of rhythm, melody and harmony, despite aesthetically comprehending the beat and lyrics of songs. By being continuously exposed to music, we tend to develop a certain degree of musical artistry. In the recent years, researchers believe that human beings in general are capable of producing and taking pleasure in music, although they possess different levels of musical comprehension. Since this ability can only be revealed through singing, it should be the main root for further researching into poor behavioral musical thinking, thus resulting in better educational solutions.

As can be easily noticed, not everyone would share the same ability to sing beautifully as professional performers. From this work's perspective, it is imperative to list out some of the main reasons behind this fact as follows:

- Inadequacy of combination between auditory and vocal organ. To put it simply, a kid may listen clearly to a certain melody, but he cannot mimic it in his own voice.
- Unavailability of auditory images. Take the last example into consideration. Without auditory images formed inside the cerebral cortex, a child would not try to create patterns of sound reproduction by himself, thus leading to the total ignorance of melodies and mimicked intonations. These are the necessary ingredients to speed up a child's musical development.
- Failure to develop the full potential of musical talent. This presents the most prevalent culprit that causes poor singing performance, as almost every song composed at private premises is made from self-playing instruments, rather than the active involvement of the performer. According to R. Päts, encouraging children to be more proactive and interested in producing music is very crucial. It would lay the foundation for musical talents to blossom (Päts 1989, 151– 152).

For these reasons, they should be placed under consideration during the process of creating musical orientation lessons for kids and organizing musical education curricula at preschool.

2.1.2 The role of music and music education

To mention the functions of music, we should not limit ourselves within the boundary of one person or one singular group, but rather spreading it out onto the whole community. As proved by scientific studies, music exerts a great deal amount of positive effect on human behaviors, emotions and state of mind (Hallam, Cross & Thaut 2009; Hallam 2006b; Selke 2007; Radocy & Boyle 2003). Its role has already been viewed in the light of every field of life, ranging from psychology, philosophy, sociology to cultural-anthropology. Together, researchers have come to a consensus that it belongs to human nature that we have a taste for structured auditory elements and then proceed with interpreting their underlying message in the sense of music enjoyment (McPherson & Hallam 2009).

According to A. Merriam (1966, 219–227), music actually takes a great number of roles in our spiritual lives, ranging from freedom of emotion expression, artistic satisfaction, recreation to an effective way of making conversation and conveying ideas. In the past, religious ceremonies treated music as an essential component, besides dancing and ritual performances. It also manifests itself in every single kid's artistic collection since it reflects the values that society accepts. In addition to that, music helps consolidate public institutions

and religious ceremonies, thus leading to the preservation of cultural values and the integration of society. Specifically, when it comes to an individual, music would act as a linking bridge for him to get closer and be more involved in a community's activities, through the process of learning social norms, customs and behavioral codes via songs and melodies. Traditions, as a result, will be kept in a constant flow of development without any interruption.

Currently, scientists mainly focus their study on human musical behaviors in order to draw up the big picture of music and its contribution to society. They can be divided into two different aspects. First is the ability to sing and making musical melodies by utilizing vocal cords. Second is the tendency to attract other people and persuade them to join the process of music production. Based on the study of M. Clayton (2009, 40–41), we can list out some of the main functions of music as follows:

- Moderate a person's spiritual mind. By performing, one has to rely on his control of various body organs like vocal cords, respiratory system while still keeping a right stance in order to produce the best musical experience to audiences. Besides, several music instruments require you to be dexterous enough to be able to create melancholic beat tracks. From the side of music listeners, they tend to develop profound emotions through the process of sympathizing with lyrics and melodies (Sloboda 2000).
- Bring people closer. For hundreds of years, people have been accustomed to delivering subtle messages through songs and melodies, especially when ordinary talking becomes unsuitable. This can be observed in some rituals where prayers are continuously interacting with Gods via chanting. Hence, music, step by step, becomes a universal language for the whole world, no matter what language you speak.
- A form of symbolization. Sometimes, it is too difficult to express our ideas into normal words. According to J. Ross, feelings expressed through songs are somewhat reflecting the truth in the society which is usually hard to describe. Nowadays, any type of melody that can be found in the field of artistic entertainment would convey a totally different meaning from its lyrical form (Tagg & Clarida 2003)
- Co-operation. When being stimulated by music, people have a tendency to react to it by using physical behaviors. From this ground, they can understand each other better

without verbal expressions, thus creating social mutuality and strengthening friendship. This is the stepping stone towards the preservation of traditions.

People need to be familiarized with music since the very earliest stage (when they are still inside the wombs). Music, when being used as a proactive stimulus, can help facilitate its functions to the growth of babies at any age. According to Heimonen, whether a child should be entitled to music education does not only draw attention from those who are already keen on accumulating music performing skills and music knowledge, but it also needs to be treated as a serious module of school curriculum which include values, objectives and contents. Beyond the sole artistry boundary, music teaching should be perceived as a general philosophy about moral codes and education as a whole (Heimonen 2006, 121).

To be more specific about the importance of music education as well as its core values, it is advised that we should take a jump back in time, seeing how music actually manifested itself in our daily activities in the past. Within the context of music teaching and learning, we will shed further light on its quintessence and the fundamental functions of education as a whole.

For almost every civilization in the past, music always played an indispensable part as it exists in every single activity. Its presence was so conspicuous that folk songs, along with their requisite instruments, were often passed down from generation to generation. Living inside a community, one was expected to take part in as many ceremonies and rituals as possible, meanwhile on those occasions it was likely that music would be played on the background as well as sung along in the form of chants or choirs. Thus, this gave room for the incessantly growing significance of music, making music education become an inevitable step for children's development (For instance, there was actual evidence of music in notable Chinese works of art and this also spread out to the boundary of philosophy itself. Many famous thinkers, like Confucius, had to express their great appreciation towards music with regard to its functions in philosophy and education.

On the grounds of archeology and history, scientists found that ancient civilizations tended to concurrently adopt and combine the act of singing, playing instruments and dancing together, mainly during religious rituals and significant ceremonies. From G. Reese's perspective,

music empowered people at that time to participate more proactively into social activities, and by doing that, they could easily interact with other people around (Reese 1940, 11).

Ancient Greece is renowned for its sheer collection of music and art masterpieces and it is Plato (427–347 BC) who was credited with enhancing the popularity of Greek artistic culture through his dialogues, especially when it concerns about the role of music in education. For him, music should be regarded as a powerful tool which had the ability to capture different senses. Among one of his famous dialogues, Protagoras, Plato actually suggested which way the teaching of music needs to be oriented towards: Since human beings start developing their own distinctive sets of characteristics even when they are still fetuses, in the very first years after birth, a child should immediately be placed under music education and this process will keep running till adulthood. Most of the time, the teaching will be carried out in the form of vocational education, just like the way music composers and singers usually receive. The learning process is mostly made of fail-and-repeat tasks and tutors are the ones who help students practice making real musical compositions right from the beginning.

In Greek education system, during the ancient times, there were two main subjects - music (*musikē*) and gymnastics. This organization derived from the old rationale that both human mind and body consolidated into culture; and though they were usually opposite to each other, a good coordination between them can create a perfect and well-balance culture for the society. During the 7th century BC, dancing and singing had to be learnt by Athenians since they were very young, as well as playing aulos and lyres. One of the most noticeable modules in their study would be singing heroic songs with the help of a lyre. It became a long-lasting symbol of tradition that there were both musical and spiritual aspects attached to it. In the next 200 years, *musikē* witnessed such an enormous degree of development that it combined traditional music, poetry and dance into a whole new subject. This was a far cry from what modern music is defined as today. To put it simple, *musikē* is the education of the mind since it assembles every single component of our brains, forcing them to make questions related to the true message behind music. Learning this subject requires the ability to connect word, singing and rhythm before continuing to grasp the underlying meaning of noble values. Those are what Greek educators tried to equip students with (Kemp, 1966).

Throughout the course of cultural evolution, music never ceased to manifest its role in shaping social behaviors. Beyond the boundary of an art form, music is truly a matter of science itself, since there is actual evidence of using mathematic formulae to calculate the best tunes for a melody, or its relationship with the study of the universe. For example, Plato once created a doctrine of his own, called *Ethos (The teaching of Ethos),* which mentions about how music can shape a person's moral conducts and educational background. This is actually based on Pythagoras' point of view, as he believed that music can be simplified as a tiny little structure where rhythms and sounds are orderly intertwined by the law of mathematics, like the way our nature is being constructed, either visibly or invisibly. When producing music, we also create an alternative way to experience every aspect of life, ranging from religious, political to personal. Back at the days, Greek government even passed certain law to limit the proper amount of music played in the city of Athens and Sparta. Evidently, for the Greeks, music had already established a profound place in their spiritual lives (Plummeridge 2001). Meanwhile, Aristotle brought up the idea of art's capability to purify itself, during the time when people already started studying about the fundamentals of the world nature through the help of musical and physical laws. Nowadays, this concept becomes the foundation of modern art therapies. In terms of religious matters, it is safe to say that Christianity and its consolidated culture had certain impacts on music and music education, not to mention that it also changed the way music played its part in the system of churches and monasteries. For instance, *Scolae Cantorum* acted as a common ground connecting music, formulary and education together. Church choral songs are well known for its ability to contribute to music education, and the rationale behind this finding is that within the strong melody of lyrics and beat tracks, every single word tend to become easier to understand. In the past students would attend schools at Latin-speaking convent, monastic or cathedral schools. Here educators did not only teach music alone, but rather supplemented it with fundamental knowledge in other subjects as well. In these institutions, choirmasters would be the one who took charge of the teaching themselves, and thanks to them, monasteries would then be transformed into some kind of singing schools. This upgrade brought about an overall effect on the whole neighborhood as people in the same community would share a similar style of singing and notation. In fact, there were records of this social pattern in many cities around Europe, including Tours, France, St Gallen, Switzerland and Metz, Lorraine. At cathedrals, theoretical subjects were of utmost

importance, so that, in 13th century, these had transferred to preparation schools for anyone who aspired to get admitted to colleges.

During medieval times, under the influence of seven free arts, schools experienced two phases of development (artes liberales). At first, called *trivium*, in which, grammar, rhetoric and dialectics were the main focus. Then, science became the central priority, as students began to shift their attention to music (as one of the heritages of antiquity) and other scientific discovery. At that time, this type of heritage was considered as the study of harmonizing the cosmos and it was such a fundamental subject that natural sciences began to root it existence in human history (Grout & Palisca 1996).

To study music, people of the Middle Ages chose to approach it in two distinctive methods: theoretical, which concerned intrinsic values of music, and practical (for example, rules, didactic solutions, etc). As for the former, the discussion about the role of music which can be applied in mental disciplines and to develop for higher philosophy. Mathematics, in general, was also a necessary module since it helped determine the right position of intervals. During this period, Boethius (approx. 480−524), the most renowned theoretician of all, based his ideas on Greek philosophical writings, then combined classical and medieval thinking into one singular concept. In his treatise *De institutione musica*, Boethius categorized music into three different groups: 1) *Musica mundana* (music of the Universe); 2) *Musica humana* (human music); 3) *Musica instrumentalis* (human voices and musical instruments which have been resounded). As often viewed in the past, human body and soul can be integrated into one piece with the appearance of music. Following Plato's ideas, Boethius praised the ability of music to ennoble or corrupt a particular person, thus giving room for music education to focus on. Among all of music teaching modules, the most difficult and complex one would be the "rational theory", meaning the finding of universal harmony through causal effect (Plummeridge 2001).

Education in the past was limited only in the form of verbal teaching, and this still continued until the 11th century when significant characters were existed. The daman of written documents increased when the Frankish Empire thrived and took control of most of the

Western Europe's territory under papal rule. Thus, musical notation became more and more popular, starting with the signs *neuma* at around the middle of the 9th century.

The development of notation in music (a stave and notes marked on it) was credited to Guido d'Arezzo (approx. 991–1034 or later), a Benedictine monk, at the very first year of the 11th century. A system of hexachords or six-tone scales was also invented serving for the demand of composers to write down tunes and sing from these documents. As a solution, Guido invented ut, re, mi, fa, sol, la which can be interpreted when being placed on a musical scale (The Editors of Encyclopaedia Britannica, 1998). To determine each syllable's pitch, one has to relate to its connection with the initial tone. Besides, hand signs were also another invention when using notation in music. Thanks to the creative work of Guido, music education was revolutionized for the next 600 years, not to mention his pedagogical techniques which, later on in the 19th century, evolved into systems of sight singing. The compact stave system that we rely on today was also an innovation from Guido as well. In this structure, a particular pitch can be illustrated by using both lines and spaces (Griffiths 2006).

As a result, music education during medieval times developed in terms of literacy (notation and names of degrees, etc.), music theoretical groundwork and Christian musical teaching at monasteries.

When Europe experienced drastic political movements in the 14th century, socio-cultural environment began changing significantly, including the populace and their viewpoint about the world. Every traditional value was on the verge of straying away from religion and this phenomenon also disseminated to other fields of art like literature and music. Some regions like Northern Italian towns witnessed the prevailing of the concept of free educated men. From here, non-religious movement began to be promulgated all over Europe, thus resulting in one of the most significant era of human history – the Renaissance. With the increasing growth of natural sciences and the innovation of printing techniques, education and science as a whole began to thrive considerably in the 16th century.

Shaking off the old impact of medieval times and Christianity soon becoming trendy as education experts at that time were perturbed by the thought of placing classical learning in

line with contemporary social evolution. Practical music making became the cornerstone of music training. J. L. Vives (1492−1540), a Spanish teacher of humanism, stated that it was meaningless if music education still limited itself inside the boundary of theories and abstract definitions. As the 16h century slowly reached to the end, the idea of universal education became so sought-after that politicians and intellectual elites kept advocating the need for establishing a common and standardized international training curriculum. The one who had a determining decision for this argument was J. A. Comenius (1592−1670), who was a theologian and educational theoretic and came up with the ubiquitous structure of primary and secondary education, both requiring music to be an indispensable subject of teaching and studying. For him, singing was so much crucial to children that he demanded those who were inborn musical talents to be prioritized to learn how to play musical instruments, as soon as possible.

At the same time with the process of secularization, there was also art revolution in churches as well, and two of the most notable representatives were M. Luther in Germany and by J. Calvin in France. Luther (1483−1546), who received a well-educated background of music and praised it as the love of God, redefined music in such an unprecedented way that it started to impact on others. Producing music was no longer just a form of art, rather it became a psychic activity that shielded us from negativity and wicked spirits. This practice was so popular at schools and churches that people tended to sing along when their minds wanted to make a connection with the spiritual world. Just like the same way as Christian choral songs, secular music also developed and then disintegrated into a variety of genres. To create a new artistic form by bonding ancient music and poetry together was one of the musicians' deepest desires and their work resulted in a lot of social impacts (Perkins 1999).

From the early of 18th century, children and their childhood were regarded as valuable in their own way, and this perception was so prevailing as a result of the momentum created from the incessant development of secularization. During the 1700s, infants were termed as a *tabula rasa* with full pure senses. This posed a discussion about the relationship between the nature and the nurture environment of a child. Education in music field, as a result, was structured in the same way as people did with language teaching – that is, memorizing new knowledge was of utmost importance when it comes to learning music (Cox 2006). Furthermore, under

the same influence of the Renaissance, singing and playing musical instrument towards elite families was considered as a method to make social interaction. T. Morley's *"Plaine and Easy Intro- duction"* (1597) followed the idea of making practical music and keep its popularity for the next 100 years (Plummeridge 2001, 618). This was also be contributed by C. Butler's *"Principles of Music"* (1636).

J. J. Rousseau (1712−1778) who was working as a philosopher of the Age of Enlightenment, named the principle standards of education in "Èmile" (1997) – one of his well-known work, which depicted a detailed explanation of music education. Unsurprisingly, singing was the most important foundation of all, as children mostly rely on their sense of hearing to receive melodic signals. This could be translated in another way; that is, musical lyrics and rhythms must be simple and easy for kids to learn. The learning process for this subject could be started since they are very small. From the research result of Rousseau in terms of theoretical and educational background, it transpired that there was truly an invention of a new system which utilized numbers to jot down both solmization signs and musical notes *(Project concernate de nouveaux signes pour la musique 1742).*

Nowadays, what educators are trying to set as the structure and the goal of their teaching methods have borne a considerable impact from great innovators of pedagogy, during the period between the end of the 1700s and the start of the 1800s. They include H. Pestalozzi (1746–1827), F. Fröbel (1782– 1852) and J. F. Herbart (1776–1841). Adopting the legacies from where Rousseau and Comenius just left behind, these intellectuals formed a new large-scale and outstanding technique to study the relationship between nurture and education as a whole, which in return was the groundbreaking event for further improvement in music education. In Pestalozzi's folk schools there were many modifications of music, ranging from lullabies, folklore and other traditional children's songs. They all played a discernable part in shaping a child's brain development. Pestalozzi also found out that there were actually social and moral lessons which could be drawn out from collective singing. Fröbel, having established many preschool institutions on his own, was the one who considered games as a type of teaching methods. He believed that they were natural and healthy activities, meaning that a child could grow very quickly by learning while he was still playing. Several games and round dances became a regular module in Fröbel's curricula.

Moreover, he also introduced a very creative musical activity called a singing talk, which required a person to answer questions rhythmically as if a tune is sang (Braun & Edwards 1976).

Reaching the 1800s, most of authority office of European believed they should focus more on educational policies as well as feel the need to establish a nationwide pedagogical system. Thanks to social reform and the development of modern education, music was officially made as a regular part of school curricula at that time, based on the grounds of organization and learning. During this period, a great deal of research on music mainly paid attention to how to consolidate ethics and encourage positive social conducts. "Instruction in Vocal Music" (1833), a work by an Englishman named J. Turner, did praise music studies and other types of participation in music performance as a healthy way of relaxation for blue-collars, replacing many alternative deviant activities. With the help of music, society experienced a significant change with controllable orientation, thus justifying the need for adding music as a compulsory subject at schools. The method of teaching music shared similar characteristics with general education, which first started with child-focused teaching and its attached value, before shifting to music, both as in the form of moral lessons and also as a chance for freedom of self-demonstration. By constantly spending time enjoying musical experiences, one might show improvement in his intellect, his creativity and his conception of artistry (Plummeridge 2001). There for, music was seen as an effective tool to introduce culture and to set national identity and to develop political system.

Some teaching measurements were introduced in the 19th century mostly inheriting the practical accomplishments of Rousseau and Pestalozzi. They were formed base on the idea that music skills were essential in music field. Children were thought to receive a level of training that was suitable and compatible with their relative age and intelligence, thus leading to a requirement that sounds should be taught before musical symbols. These were part of suggestions from the Swiss M.T. Pfeiffer and H.G. Nägel and a German C.A. Zeller. There had been a great number of attempts, trying to look for necessary musical aptitudes in order to tackle the concerns of solmization and the follow up application. Therefore, in France, P. Galin, A. Paris, N. Paris and E. Chevé , all of them chose to look into the Tonic Do system (The Editors of Encyclopaedia Britannica, 1998). This approach, called the

GALIN-PARIS-CHEVÉ method, was popularly adopted in the the Baltic German school and around European nations, in 19th century. In Estonia, C. G. Oettel also released some publications which explained the usage of that method to understand music (Ernits 2009). Meanwhile, Scandinavian countries preferred to take a closer look at the Tonic Do system itself, by publishing songbooks which contained figure notation (Plummeridge 2001). In England, the Tonic Sol-Fa method was received the attention from J.Curwen and his eldest son J. S. Curwen (1847−1916). *"School Music Abroad"* was also be written by J. S. Curwen, in which he described music teaching process in various nations at the end of the 19th century. Interestingly, at *l´Ecole Enfantine de Malagnon*, a nursery school, a music activity was organized for the 3 to 7 years old children, and a soft tender voice was used to sing along with the students. (in which the teacher modelled the singing and students were supposed to follow her with their consequent repetition). There was sight of neither a piano nor exercises, since every single lesson was delivered in a playful way, with the assistance of stories and pictures. Songs in use were entirely seasonal and teachers themselves were passionate enough to inspire kids to play with them (Cox 2006, 404).

From the early of 20th century, singing along to music became a widespread subject in every kindergarten. The number of contemporary songs being composed rose up considerably, replacing old-fashioned church music. In the 20th century, great musicians and famous educators started to influence the development of music education, including a Swiss E. J. Dalcroze (1865−1950), a German C. Orff (1895 −1982) and a Hungarian Z. Kodály (1882−1967). From their perspective on pedagogy and philosophy, music education should be made accessible to every person from all walks of life, rather than being limited to talented youngsters only. Teachers with high aptitude should take charge of the educating procedure itself, as part of systematic education.

Approaching music education in the light of Dalcroze's structural thinking, we realize that teaching music means using our bodies to describe music's functions; in other words, we can derive the characteristics of music from our daily life. Dalcroze leaned mostly towards the development of an ability to feel and understand rhythms in human beings, without opposing the general approach of music philosophy and the movement of tone and rhythmic (Woods & York 2001).

The first idea of Orff's music training was from his co-operation with D. Günthe in Germany during the years of 1920s. Uniting music and movement became the objective of any music teacher at school. This mutually positive relationship, together with kids' folk songs and games, forced Orff to invent a system named after him (Orff-system), in which he estimated the process of music producing by using a set of unique instruments following rhymes. Among his works, the most important result was to increase the stimutate children, encouraging them to actively produce their own music creations. His entire ideas of music education were actually revealed in five volumes of the collection "Orff-Schulwerk – Musik für Kinder" (Päts 1989).

For the Hungarian composer Z. Kodály, his most famous legacy came from his sheer devotion to the study of music training process. At the time between 1940s and 1950s, a structure similar to sight reading was invested, integrating the sol-fa in Italy and English, and J. Curwen's singing hand elements and rhythm syllables by Chevé from France. Kodály's innovation was so unique that it can be combined with other distinctive techniques mentioned above into a singular complete system, with a view to acquiring the comparison between music heard and the characters seen in the notion, which had the background of Hungarian folk music. This methodology hinged on philosophical convictions that music education reaches its full potential of efficiency when it starts since the learners are young and the folk songs in the mother tongue language help them to master speaking skills quicker which explains why they are necessary throughout early education. Among all of the modules of the curriculum, music should be the central point, and the best way to take part in the process of teaching music is to simply sing. Folkloristic and composed is the high-quality music source which are available for children's music making and listening. There are 1500 songs were available in music education method introduced by Z. Kodály, providing a wide range from easiest monopoly to the most complicated one (Choksy et al 2001). Together with Dalcroze and Orff, his ideology of music is vitally influencing music education even at this moment, during the 21st century.

2.2 Technology in music education

People possess variable understanding as to speaking their point of view on the adoption of electronic innovation in music (being well known as “music technology”). In this manner, we can describe them as electronic keyboards, sound modules, and recorders of multiple tracks, synth, hardware or software sequencers and any means of working with sounds by digital inventions.

The micro-electronic technology has been developing since 1980s and following major effects to music industry. For example, a new range of sounds can be produced thanks to memory chips and microprocessor instruments. Devices are now widely linked among instrumentalists, from keyboards to drums and shared to the same platform with a computer. The way to create music is not limited in traditional musical instruments because a modern musician can only have a cheap computer and fast internet connections. In addition, with the help of inexpensive software, there is no need of profession or wide range of knowledge about music (Crow, 2006).

Although the high tech is known as a key device for developing knowledge societies (Communiqué of the ministerial roundtable on ‘Towards Knowledge Societies’ UNESCO Paris 2003), there is just a small part of people who wanted to “trying a new game” (Hennessy et al., 2005). There is a huge rate of research on using ICT in teaching describes an ineffective and low level pedagogical change (Somekh, 2008), despite the researches identify its potential to transform the educational industry by shifting from local to global resource, from focusing on teacher to student or philosophies moving from instructivist to constructivist. The adoption of information and communication technology are influenced by regulatory frameworks and culture theories, thus in contrast of slow change in other areas, pedagodical music witnessed the exponential rate of growth. The revolution is remarkable because it succeeded in both educational and commercial application, hardware and software development to properly change the way education in the way people want it to be.

However, the researches always demonstrate a superior of digital technology over traditional procedures in learning and teaching music from foundation. Theoretically, the curriculums are under transferred and bringing much benefit to both academic and commercial areas.

Muro (1996) believed that software improvement are ideal tools to instruct music thus full packages must be carefully selected, adopted and used. Supportive idea is of music software includes 3 parts: cognitive materials for technical knowledge, psychomotor material for skills and perception study and affective materials for emotional and valued experiences. The high-tech programs utilize the drill-and-practice, tutorial interaction, game techniques or problem solving as a mean of education. The more advanced programs are, the more approaches they combined. So far, the practical and theoretical opinion of implementing new innovation in pedagogic music are parallel improving and both prove its advantages and disadvantages.

2.3 Measuring student performance in music education

Meanwhile, as a scholar subject, it is required to assess and rank students in their learning. And as other subjects, each student has different ability, interest, background or technical knowledge. Studying is continuous process that the teachers need to understand the students' position in their own road, their potential and their actions to achieve their best. Therefore, it is important that the assessment mechanism flexible enough to go along with each student's road of development.

Music education should be individualized – this concept is specific highlighted. The strong support can be named by Hale and Green (2009), Burrack (2002), Hill (2003), Shuler (2011), Standerfer's (2011), etc.

All of the above suggest a measurement to understand and assess where students are and what need to do. Hale and Green announced their 6-principles but still claimed that there is no difference between measuring student progress in music and in other subjects. Teachers must (a) fully understand the content and know where the students are headed in terms of their expectation of learning, (b) understand student's available knowledge so as to accurately let them in the correct starting point, (c) assess the student's performance as they go through the content, (d) instruct students to self-assess so as to get a personalized snapshot feedback of their knowledge in comparison of their expectation before, (e) schedule a plan of lessons in a rubric-like format allowing both the teacher and the student to know what different stages of mastery looks like, and (f) come up with a way to assess themselves in order to make sure

the methods and approaches they are using are most effective in terms of student learning.

To support this principle, Burrack (2002)'s research discussed about the subjectivity of teacher and the numeric scores in determining the qualitative characteristic such as students' progress and growth in learning. The traditional methods might check the attendance or technical skills, which are important, but the broader context should be focus to create and provide more opportunities to encourage students' ability and inspiration to learn music. For example, self and group assessment including grading and feedback should be considered in term of aesthetic sensitivity, problem solving, creative thinking and critical-listening skills. The appropriate feedbacks which are tied with grading results will help gain perspective between studying purpose and their personality, also self and group assessments can nurture students' self-reflective capacity and their personal image.

In consideration of individualization schooling, another support from Hill highlight the unique of educational approach as the students involved by getting to know them. Hill rejected to offer a specifically designed method for the widely different abilities and interests of a vast pool of potential.

Along similar lines of inclusive thought, Shuler (2011) explained the personalization of music education as an inevitable approach, although not necessarily or typically found in other subjects. Unlike other colleagues who work in other subjects, music teachers usually spend their free hobby time with music, which is both their interest and their career. Their subject bonds from avocation to the teaching content so it is like music teachers are personally connected to their music lesson programs. Also, the classes are electives and so are the students attending. Without personally understanding and personalizing the curriculum, it is impossible to keep the teachers' interest of their own and keep students' interest with truly emotions and enthusiasm. Without understanding each student's unique background and different ability to learn and study, it is impossible to effectively construct an appropriate course structure. Only with the mindset of relate everything to the specific need of individuals that the teachers can create a course, monitor the assessment and measure the growth properly. The curriculum and instruction of contemporary music teachers is in a need

of change as a result of the rapidly changing of education and the growth in number of learners (Shuler, 2011).

However, Standerfer's (2011) opinion about differential approach to teach music simplify the efforts that music teachers must spend on. Differentiation does not mean individualized lesson to meet specific learning objective. Grouping students at different level of common characteristic will reduce the complexity, such as experience, readiness, learning skills or processing ability, etc. The instruction is differentiated for each group or level to ensure that the program is engaging and appropriate for all learners, which include content, process, and product. There are several considerations but the underlying basis is remaining and the teacher are working on accomplishing this in a number of different ways. One of the popular ways is the portfolio.

Researches and discussion about portfolio are published and available. Hill (2008) summarized main types of portfolios as learning, assessment, and employment in a person's career as a student and a performer.

In another hand, Mills (2009) recommend portfolios as a music classroom effective tool to measure student progress with three different types of portfolios including learning, summative, and product and performance portfolios, which are helpful for teachers when arranging or ranking students in a group or section.

With the same purpose, Linn and Miller (2008) suggested a five-step program including (a) specifying the intention of the portfolio with a purpose and clear vision, (b) providing a guideline and instruction for the portfolio as well as clearly presenting the content, (c) a vividly defined description of the students' responsibilities as a self-reflector with available support in helping students learn this process, (d) discussing based on the portfolio on specific content concerns, strengths, and weaknesses, and (e) grading based on the portfolio with a rubric outlining specific requirements so the student can exactly know and understand their works to achieve a grade with which they are satisfied.

Above all said importance of differentiation, the portfolio model with correct usage by the teacher will afford opportunities for all students to take ownership of their own learning in

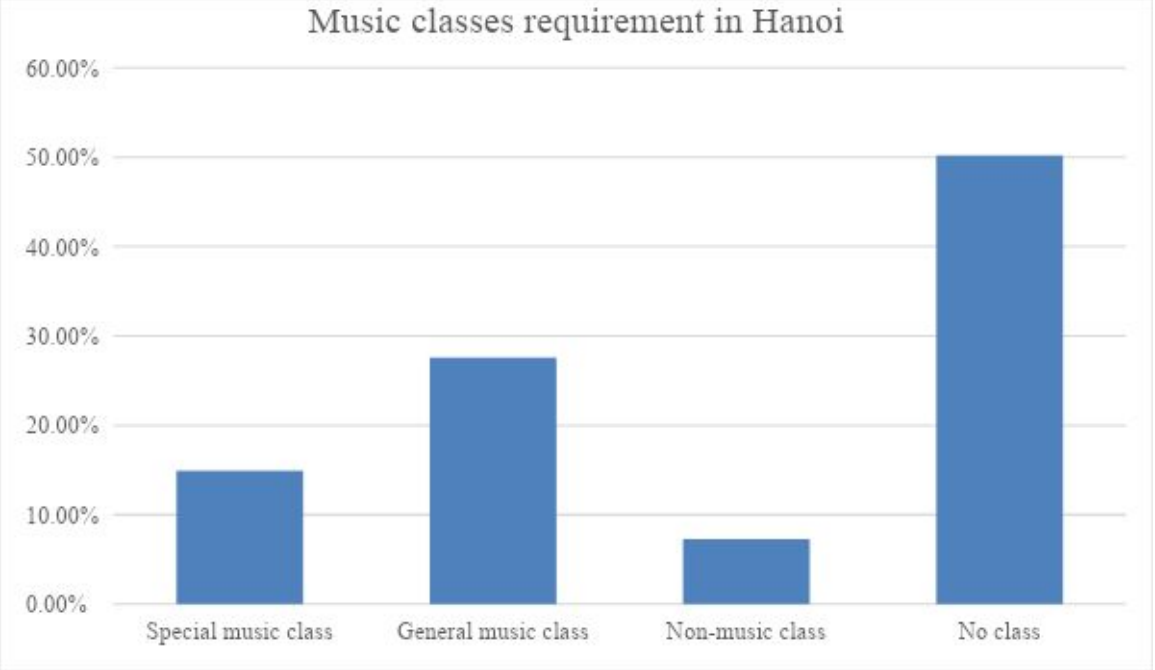
such a personalized way that corresponds with their individual strength and interest, skills and abilities.

Förnamn Efternamn

3 ANALYSIS

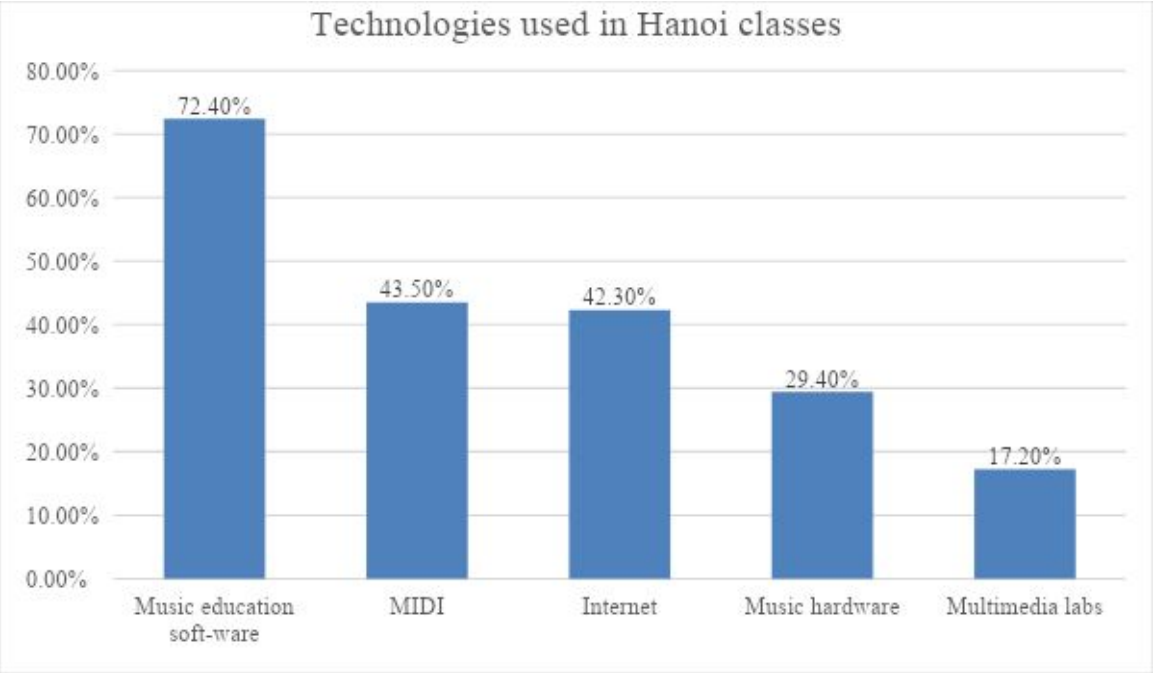
3.1 Common technologies used in music teaching in Hanoi

Of all 150 respondents from different training centers in Hanoi, more than 50% indicated that they do not specially designed the music course for students. However, it is notable that less than 30% of training centers requires students to pass the national program of music. Also, 15% of the respondents have a music proficiency examination. In addition, 7% of them provide other media application such as presentation software and programs.



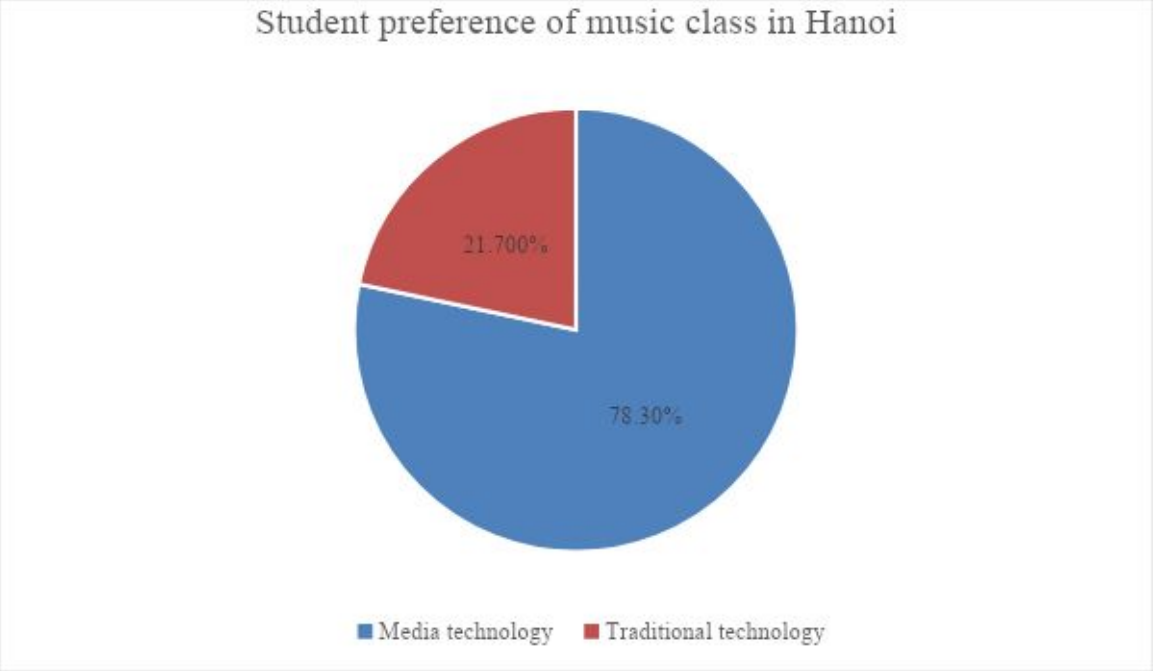
The survey shows that the most common technologies applied in music classes in Hanoi are music education software (72%), MlDl (43%), Internet (42%), and music hardware (29%). Multimedia labs is a new and expensive channel but still appears in 17% of classes. It is not a surprise that the Music education software is the most popular method to be applied in Hanoi training centers as there is an official supplier from government, which creates an advantage of prices and requirements in training centers. However, with the improvement of

technology, the internet is gradually becoming popular with unlimited resources and features offered at a small price.



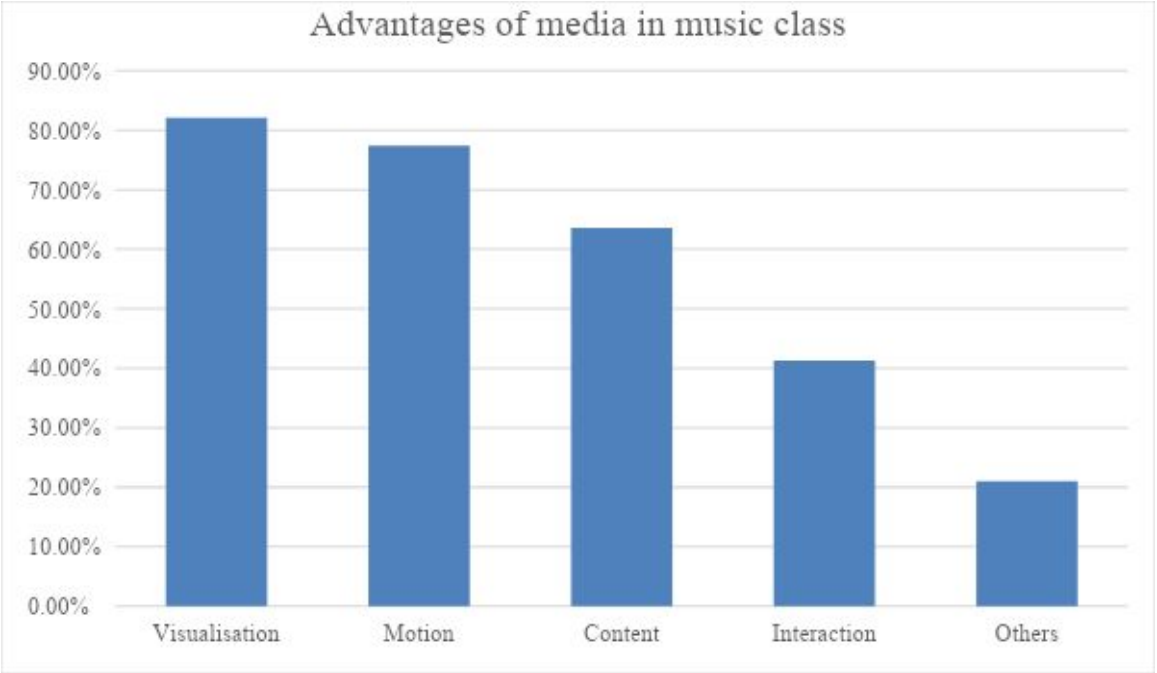
3.2 The impact of video teaching on traditional teaching and learning music for young children

The comparison of teaching and learning music using media and traditional methods is conducted by interviewing 240 students and 150 teachers in Hanoi. It is observable that students that the young children find it more interesting to participate in classes using media technologies. 78% of the students prefer the class with media technologies, in which, the effect of visualization and videos are the most differences that help students' interest in the class.



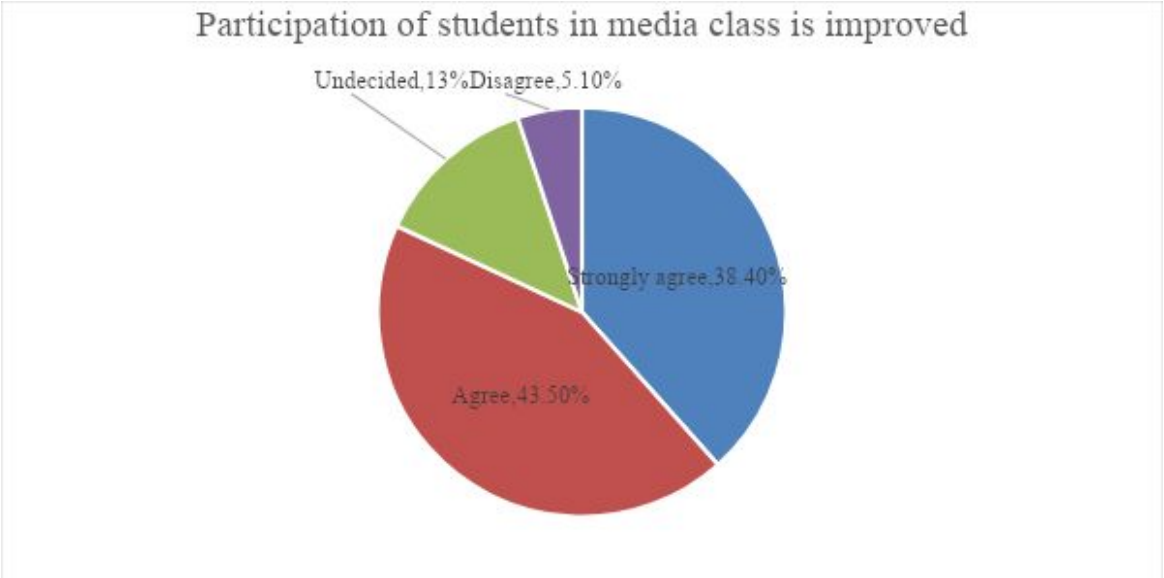
The positive effect of media in creating the students' interest is because of its advantages, including:

- Visualization effect (82%);
- Motional effect (77%);
- Interesting contents (63%);
- High interaction effect (41%);
- Others (21%).

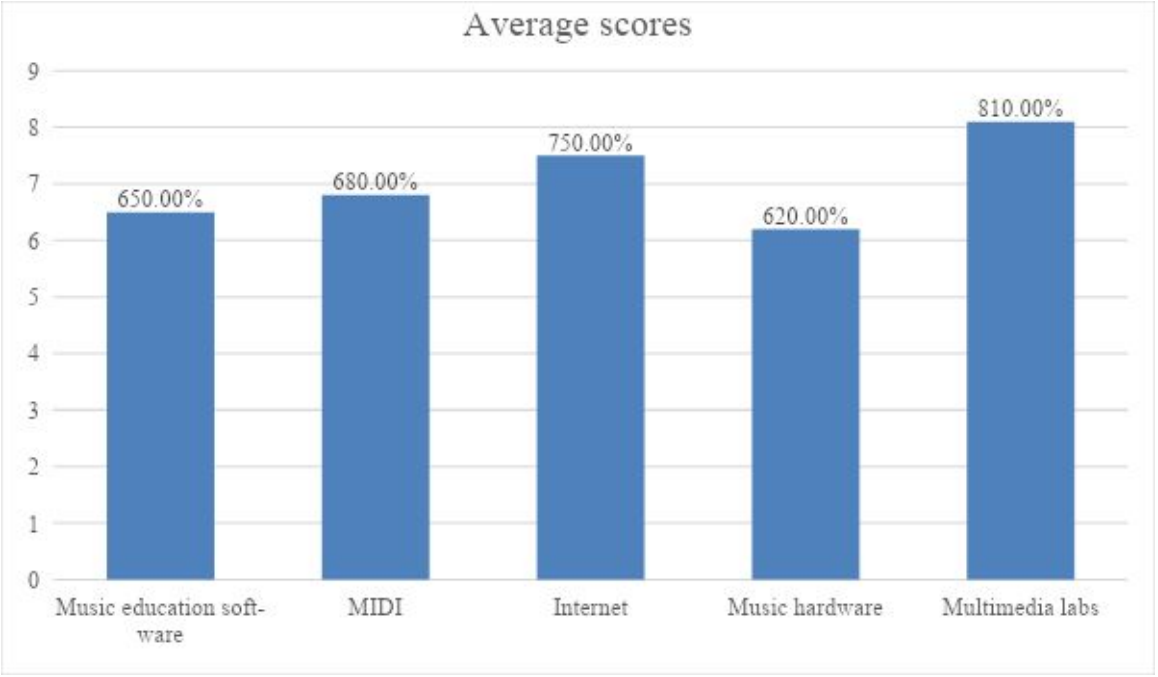


The teachers also have positive responses to the teaching method using media. The students' participation in the class is confirmed to be better in the class using media technologies. The teachers interviewed mostly agree that the level of participation of the students is improved. This statement received the following result:

Strongly agree	Agree	Undecided	Disagree	Strongly disagree
38.4%	43.5%	13%	5.1%	0%



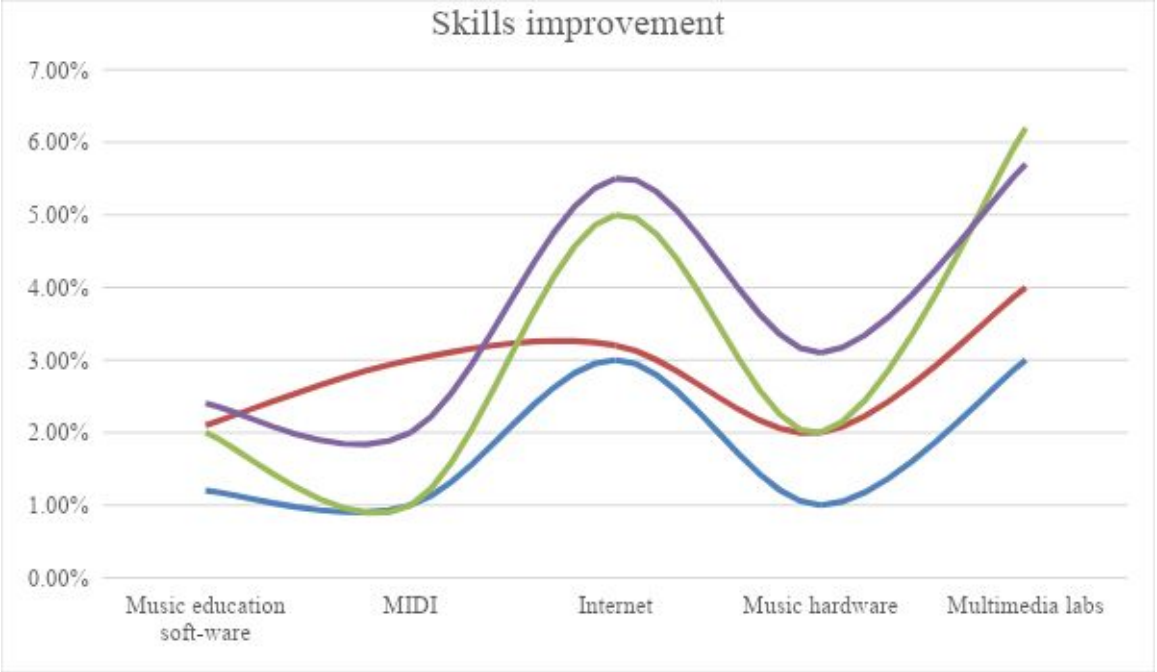
As can be seen, the participation and level of interest for young children are improved when applying the media technologies in teaching and learning music. The final course testing results is also improving after applying media technologies in the classes. Specifically, the measured skills for 240 young children illustrate an increasing average score as below:



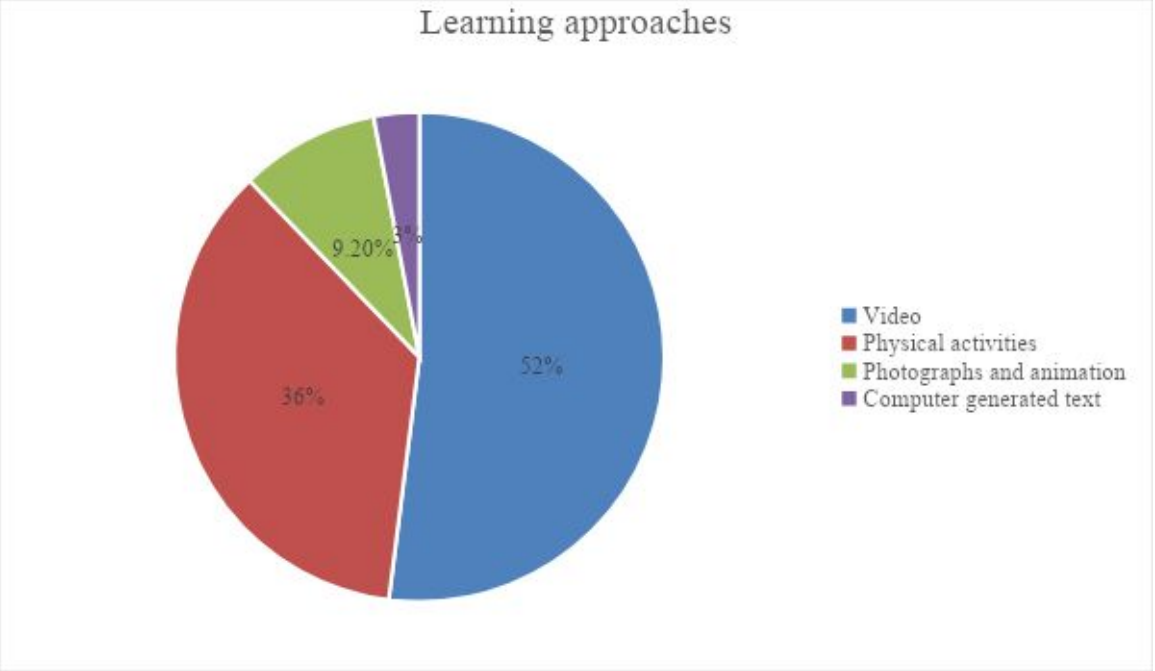
It is noticeable that the music education soft-ware, despite the popularity in the training classes, results in the lowest score. The students taught by multimedia labs achieve the

highest score at 8.1. Internet is also an effective way in teaching and learning music, which helps students to get the average score of 7.5.

Moreover, the detail improvement in terms of other skills, such as team-work, social development, creativity, and self-expression are displayed as below:



In further investigation, we discover the most preferred materials of students in the digital technologies. Music learning and teaching is now integrated with the development of approaches, for example, using videos, photographs, animations, or physical activities. The students responded to the interview question about their preferred learning approaches as below:



It can be seen that using videos in teaching and learning music is the most preferable approach to students when more than a half of respondents find it favorite. Integration of physical activities is also popular and helpful to increase the young children's interest of 36% responses. It is not surprising that the generated text is the least favorite approach to the young children.

From the above studies, there are three key concepts which can be deducted about the pedagogical impact of video: 1) Interactivity with content 2) Engagement 3) Knowledge transfer and memory. These key ideas are a part of process in which content becomes the key standard and a promotion of cognitive development: the visual content is accessed by the learners interactively through note taking or practicing the concepts (Filmstretch, 2019). The engagement occurs whether on-demand or real-time, based on the connection between students and visual content. The realm, which represent for the emotion of learning is the starting stage of interactively and engagement. To have the best experience, the quality video should be high. When the engagement occurred, a flow of continuum into knowledge transfer and memory which is according to some previous researches, improving the students'* (Filmstretch, 2019). So the the key finding of the theory is a merge of cognitive development, affective and retention of content. Although the Additive Enhancement to Analog Tools Just – a type of Multimedia Learning Continuum Video is using in teaching currently, there is still

not enough for the knowledge transferring process (Greenberg & Zanetis, 2012).. That is the reason why oral presentation, recorded audio, slides and other forms of media are transferring by video. The role of this type of media is not only for emphasis, but also a channel of learning, which is used by both students through the digital devices and educators. There are some debates existed about this topic. However, most studies lead to the positive impact of visual content on students about obtaining the concept and applying them. As a finding of Corporation for Public Broadcasting about the influences of video and television in North American schools, the number of teachers who agreed that video form helped them to be more effectively in the knowledge transferring process, and 88 percent of them expressed that they became more creative when using technology. In a meantime, there was nearly 80 percent students gained better outcome when using video technology during the class. (Corporation for Public Broadcasting,1997). This type of media not only creates a merge between visual and auditory stimuli but also provides students the actual experiences in outside world. Thank to video learning form, the learners do not have to travel in a far distance but still gain knowledge from expert, especially for the students in remote area (Greenberg & Zanetis, 2012).

Video contains a lot of way to transfer information: images, motion, sounds, texts in a complementary fashion, the way for students to obtain knowledge can be adjusted more easily. Through a lot of functions available through video: stop, rewind, replay and so on, the learners can control the knowledge that they received. As a finding of the multiple intelligence theory of Howard Gardner in the related fields, the traditional learning methods are only suitable for the people who have a linguistic approach (Greenberg & Zanetis, 2012).. On another hand, learning through video is suitable and effective for a wider range of students (Marshall). Researches have also proven that the meaning of video is having a relationship with the integration within the curriculum and the influence it makes on overall instructional sequence. So that, video is becoming a complementary tool of training activities instead of a substitute. Media and technologies should be used besides textbooks to produce the best result of learning process because it enhances the learning process. The impact of video and other visual technology affected on educational outcomes is still on research. However, in the present, nearly all of the researches in this field are only focus on a small sample test, so they can not cover and present the large student populations. Although the

final answers of how visual technologies impact on education field is still a question mark, numerous studies have illustrated the role of enhance learning of this on learners compared to the traditional methods. In 2008, Cisco has completed a study which found that adding visual to verbal learning (which only includes text or auditory) can lead to significant growth in basic and higher education learning. In addition, Boster's study in 2004 has drawn a large growth in math results of 2500 six-grades and eight-grades students in Los Angeles who used video learning form in demand (Boster, 2004). For another example, Bryant, Alexander, and Braun (1983) found that there was a big improvement in reading skills as well as logical skills such as mathematics, the test results of Peabody Picture Vocabulary Test (PPVT) is also improved. Other process such as visual processing and spatial perceptual skills also reflect the higher results. Not only that, the understanding of health and human anatomy and other field such as culture awareness and attitude to people in different race were shown positive improvement. Although there is no literature showing the impact of visual devices on academic performance, the influence of this on skills related to obtain knowledge, comprehension and the way to develop critical thinking about a specific topic. Most of research on this field is focus on higher education learners who using video as a complement tool for these learning process while the researches focus on lower ages learners – primary and secondary students have only worked on one-way real-time video and broadcast video, and some of them are on-demand videos. As a result of studies conducted by Children's Television Workshop (CTW), children's abilities relating to fact recall and logical skills such as problem-solving skill and growing the interest of math and science (Children's). A survey on teachers about the use of instructional video by TV Ontario (1995) concluded that this way of learning was not only build the interest of students during the class but also provide an easier way for them to obtain new knowledge and concept (Stern).

Using visual device such as video has shown some positive impacts on: Study performance: A lot of studies conducted by colleges and university proved that using on-demand video increased the scores of students. The control group and experimental groups were used by a part of these studies to ensure the true comparisons and the higher performance of these group was shown. So that, the result of students who learn through viewing streaming video is higher than the traditional face-to-face learning class. Another survey about students'

opinions about their learning results and experiences. This also affects on retention rate, as a finding of some studies.

About school readiness: The connection between ability of learning letter and number and number has been shown. According to more in-dept analysis of educational which used television, as a long-term determinant, the students who watch educational channels on television got better performance in preschooler and college. 47% of teacher surveyed believe video content influences on students' creativity while 31% of them support for the idea that video is more effective than other types of instructional resources.

About student's collaborative abilities: The problem-solving and team-work are encourages by using video in educational purpose. As a result, a future generation which have the better skills of teamwork and association as well as multicultural awareness. In present, a lot of on-demand video flatform has been created for improving student collaboration ability.

About overall academic development: As a finding of a large number of previous researches, the development of intellectual and academic can have positive affected by watching educational TV programs since they were children. Moreover, the result on learning performance of students who used both online instruction and face-to-face learning can be equal or higher of either one of these methods. Many programs have been created with the combination of video and other learning methods.

Student motivation: The learner's motivation is improved when they can interact with the content using the channels such as storytelling, or the degree of control of personalization and how the video content is used. In addition, a higher feeling of empower and ownership is higher since the students are asked to build the digital content for learning purpose. So that, not only the motivation of students in the subject is enhanced but students also gain essential soft skills such as creativity, leadership and project management (Filmstretch, 2019).

Learning Engagement: The result of many studies using video in the traditional delivery such as DVD or other multimedia formats founded that students can choose the form and pace that suitable for them. In a mean time, other video delivery format such as on-demand streaming enables students to control the learning process such as repeat separate part of lesson which help them to self-control the learning speed and become more effective. An important result

of studies of video education is: learners who can customize the knowledge obtain process can have better motivation and engagement which are caused by the familiar and grasp of students of the technology (Filmstretch, 2019).

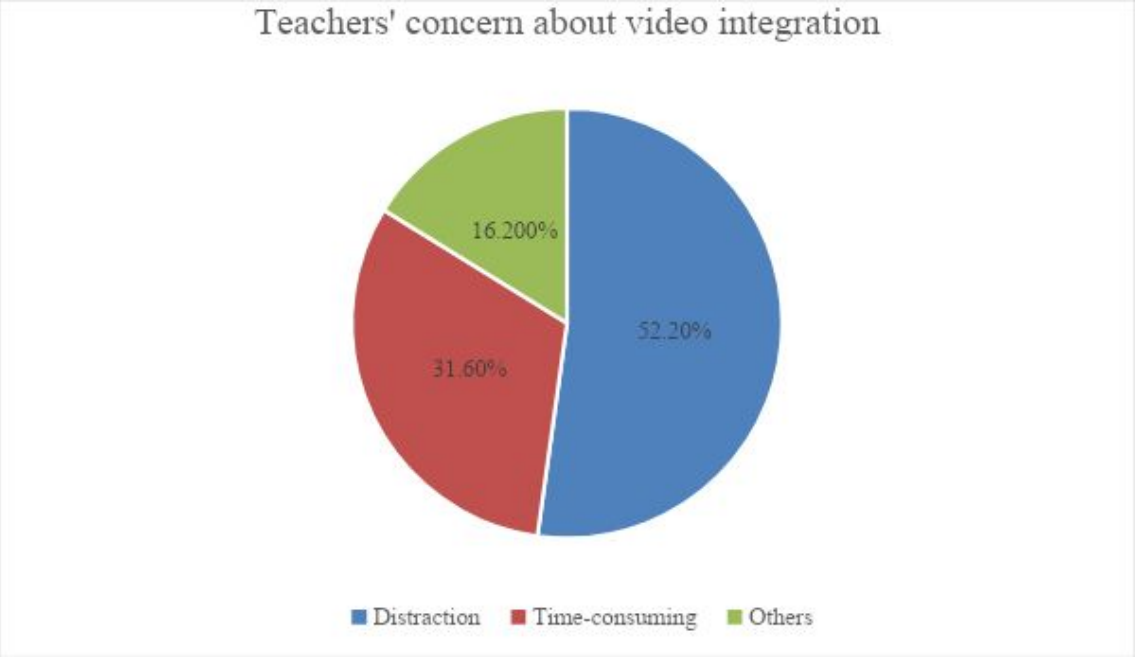
Finally, both on-demand and real-time channels are supporting leaners with experiences occurred outside the classroom. Furthermore, for students in lower grades such as primary and secondary, who spent a large part of their days inside brink-and-mortal institution, the need of using video to provide them more outside knowledge is necessary (Filmstretch, 2019).

Learner contextuality: Studies has shown the advantage of using video was preferred than traditional methods such as text or static images because video provide students the opportunity to lend themselves through the video content. In addition, through the actual scenes delivered by videos, the understanding of different cultures is increasing which relating to lower rate of isolation and even xenophobia (Filmstretch, 2019).

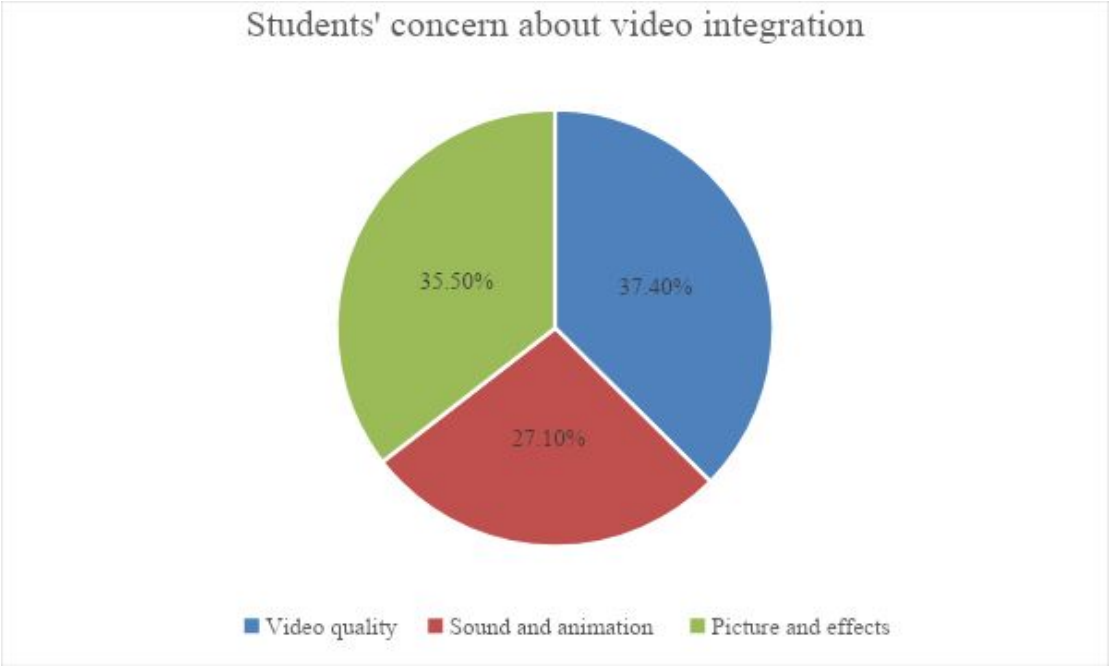
Social skills: Video has put several good impacts on pro-social skills of children which has been researched by numerous studies, these skills include sharing and acceptance of others. The social skills are also developed through some study tasks such as create a video and share them with other fellows in group or class. Studies proved that when a source of knowledge is used by students to create other thing based on it, their understanding about the information is better compare to only read and use the information passively (Filmstretch, 2019).

Digital and multimedia literacy: By providing more change for students to use video helps students to gain a sort of knowledge about media and ICT technologies, by using these devices through classes, students can be an expert and more content could be created. In a meantime, students can gain essential soft skills such as critical thinking, creativity, collaboration and communication which are really important for their work in the future.

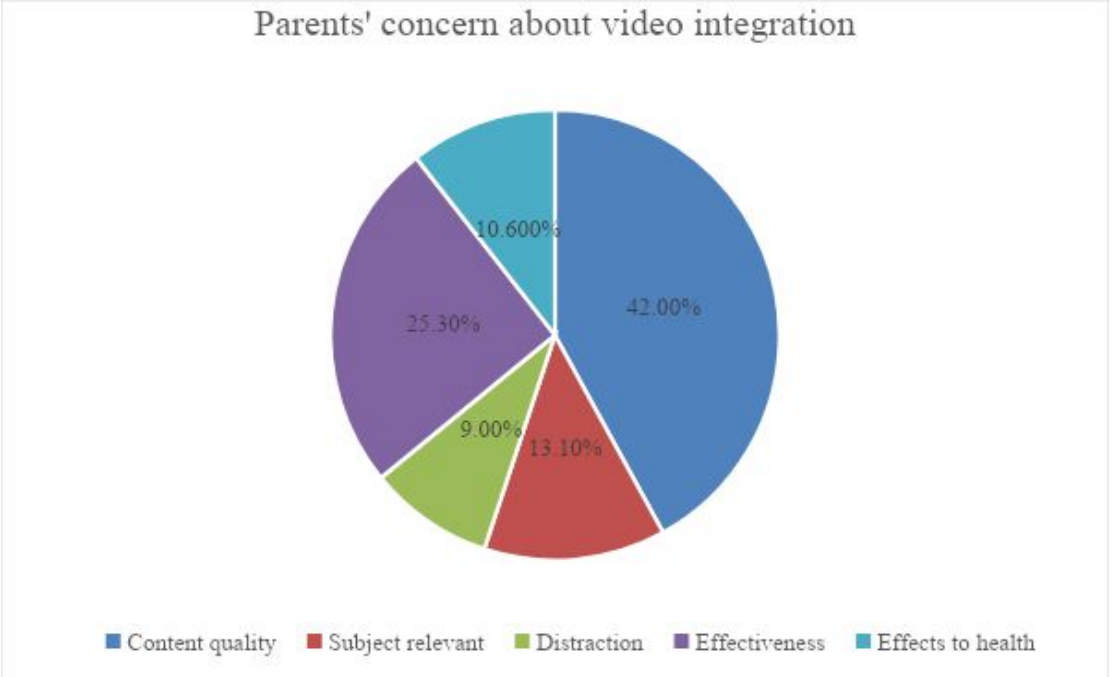
3.3 Problems related to the integration of video



Although the development of using video as a major approach in learning and teaching music to young students in Hanoi training centers, the teachers also find the problems related to the integration of video. Despite being favorable by the children, videos are claimed to result in the distraction in learning process (52%), as well as the time-consuming in preparation (31%), which are the most issues to the teachers. On another hand, the students concern about the video quality (37%), sound and animation (27%), picture and effects (35%).



In addition, the parents also consider about the integration of videos in learning and teaching music, mainly about the content quality and the effectiveness of this approach. The responses is illustrated in the graph below.



A half of 100 studies about all forms of video were chosen to illustrate clearly the effect of using video in class and make the conclusion about the impact of this form of knowledge delivery on education.

4 CONCLUSION

The chapter indicates study conclusions and presents contributions of the study. The chapter indicates the research's limitations and suggestions for further studies. Moreover, it presents recommendations for relevant entities to increase the effectiveness of music education in the future.

Although a huge amount of brain research has been underestimated in the past few years, the application of video on the needs of learners in present and future is developing. The various ways which suitable for different groups of learners have been identified by researchers. The finding of Harvard's Clayton Christensen illustrated that nowadays, the educational programs are developing through student-centric learning object. In a meantime, the way of thinking, access, process and use the information happened by children are totally different compared to previous generations. Moreover, due to the change of teaching process happened and technology applications, the way that these children interact, analyze and communicate are changed. The application of visual-spatial in learning is increase, which allows students to multitask and familiar to multimedia (Chasse, Auricchio, & Liebert, 2017). Although this type of knowledge delivery channel is not perfect and available for all criteria, video has shown its unreplaceable tool which has a strong influence on how students obtain the new information. In another view, the video learning users are still in interpret and digest mode when they use this media in any forms: presentation, video clips or two-way video. But the role and impact of video on learning activities are undeniable. To have the best result, the content creators have to construct the video according to the pedagogic need and the content have to be controlled carefully. There are a lot of circumstances that people shown ineffective in communication effectively. In that case, the knowledge transferring between teachers and learners about the meaning and information of the lessons face many difficulties. However, with the help of video, these situations would reduce with the development of multiple types of information transfer devices. As an application of video on the 21th century, the skill of

collocation is on a high demand for future citizens and learner-generated video would be a significant tool for students serving for this purpose (Chasse, Auricchio, & Liebert, 2017). Besides that, learner- generated video is another channel for students in class to illustrate and demonstrate their ideas or projects to their fellows. In the present, the most common skills that already built during the learning process is multimedia creation, in the form of delivering the presentation for the authentic audiences (community stakeholders). That is the reason why students are being tough to make the wise decision when they apply multimedia. Finally, the quick development of visual technology allows teachers to other opportunity. In the past, teacher was only provided their classes in person, while now, visual technology provides them the chance to open classes in a far distance so the external factors such as time or geographies could reduce their influences on training activities. So that, with the help of multimedia, the teacher can provide the class and become the mentor of learners globally, and the students can choose the suitable mentors base on their pedagogical ability as well as their professional. As a result, the world is turning into a large classroom which provides all information serving for purposes and topics of citizens in which broadcast and streaming video play an important role for this classroom.

The adoption of video on education field is being helped by pedagogical, technological and social demands (Chasse, Auricchio, & Liebert, 2017). Pedagogical factors create for students the opportunity to decide their own learning methods which are suitable, this also help students to develop the skills needed for globalization and required skills for labor force: critical analysis and problem-solving skills. Firstly, the pedagogical factor is providing students opportunities to choose the suitable learning method and help them to build the skills required for globalization and future labor force such as critical analysis or problem-solving skills. Secondly, technological factor also has an important role in applying video on education. This factor providing the resources and channels for students to access to video training flatform such as internet connection; higher traffic in video consumption; and the physical devices like smartphones and touchpads. Thirdly, social demands require the new generation of educator has to gain basic knowledge in applying technology on teaching, which brings greater willingness to a merge of inside and outside classroom experience and knowledge. The attitudes of teachers toward technology is changing in a fast mode. For more and more teachers who have technology background, the more comfortable they feel when

apply it on methodologies. As a finding of American Public Broadcasting System's (PBS) on a study about the use of media and technology by teachers, there was an annual stable increase in the number of multimedia and video content used for teaching purpose since 2013 (PBS LearningMedia, 2013). Below are result of 2010 study on this field:

- 68 percent agreed that video develop the discussions
- 66 percent agreed that video create the interest of students during the lessons
- 55 percent agreed that video develop teachers' creativity.
- 62 percent agreed that the class could be more effective with the help of video
- 61 percent agreed that video is more favorable for students.
- 42 percent agreed that video lead to better studying performance.

An important factor which promote the application of video on education is learners' technology skills and their interest in this type of media. In the past, a lot of teachers and students could not attend in front of the camera because of shyness. In contrast, many of them are more willing than ever to take a role in the video, especially for learning purpose. This create the viral of video applying inside the classroom, in the way that learners using video and filmed their own video during the course. A challenge called "Barriers Challenge" was existed for wider the use of video inside the classroom. The similar challenges might relate to technological, legislative, behavioral, and resource-based.

However, there are still some barrier for applying this type of visual technology in teaching purpose. The technological barriers occurred when some organizations and institutions, especially the one located in rural areas, find on-demand streaming video is hard to access because of the lack of technology. On the other hand, the communication companies also find it hard to afford the bandwidth which is suitable for video streaming activity as the expectation of teachers and students. The steps that learners and educators apply this technology on learning and the fidelity of the process could also hinder success. The fidelity of the process is based on management skills, professional, school culture and some of the degree by the types of technology access. The mistakes while using the equipment and reliability of them are also creating the difficulty when adopting video on classroom. Technical glitches might happen from the physical part or software; however, teachers usually not have enough technique to troubleshoot these problems quickly (Johnson, Jacovina, Russell, & Soto, 2016). Continuous technical problem can not only make a bad

effect on the flow of information during the class but also reduce the motivation and engagement of all class participants. Legislative barriers: The process of applying video on education which fit the special requirement of learners cost a huge budget which can not effort by some countries. Furthermore, in some nations there is a lack of science and technology policy and government fund toward this application. The balance of bringing technology to education and making profit is also a math for decision maker. Behavioral barriers: the behavior and attitude toward the new technology can be barriers when adopting new technology to the classroom (Johnson, Jacovina, Russell, & Soto, 2016). In 1992, Polin listed four stages in the adoption process of multimedia technology into education field: 1) The Comfort Zone, when teachers are familiar with the equipment. 2) Disjointed Instructional Use, when the teachers can have basic use of technology, however, they are not fully suitable for all the need and still need the help from other method. 3) Integrated Instructional Use: When teachers can have basic customize the technology into construction plan but it still driven by technology 4) Transparent Integration: teachers can fully apply the technology on content and structure of a given strategy. At this stage, the technology is playing the role as one tool which accomplish the teaching purpose. Teachers typically finish these steps before a new technology is applied into the teaching process. A part of teachers does not feel comfortable when "teaching' a camera and feel at a disadvantage vis-a-vis their students regarding proficiency in technology (Johnson, Jacovina, Russell, & Soto, 2016). These teachers must adjust their behavior to match school's culture, vision, resources, and guidelines. When a new method is using for the first periods, it takes more time for users than traditional method to prepare and research. The instructor may take additional time to build the expertise in technology and also identify and build the content structure and develop supporting materials such as handouts, slides, and further reading notes. For given subjects (for example, science subjects), teachers need to allot additional time for build the set of appropriate exercise and consolidate the meaning of video (Johnson, Jacovina, Russell, & Soto, 2016). In the case of learning in a far distance, instructors also consider the additional time for factors such as time to prepare and access to supporting materials and follow up question as well as the motivation for students to continue the class once the video finished. Another challenge occurred is the faculty resistance. This might happen among the post-secondary educators who underestimated the use of on-demand technologies, especially if they believe on the risk of intellectual property and digital rights issues. On the other hand,

since more high-profile institutions have posted the lessons online for public access, more teachers are using this method to stream the lesson as a positive for professors, departments, and institutions. Resource-based barriers: According to some research, the proportion of high-quality educational TV program is still low. Which is the result of subject matter and education level. To take an example, book publisher is now the combination of print books and digital books which can include more media and web 2.0 capabilities. However, this challenge is usually happened because of lack of professional development or support. Sometime, the support for video adoption is still weak, which lead to other problems and reduce the positive point when applying this media on education process (Johnson, Jacovina, Russell, & Soto, 2016).

The research has three key contributions. Firstly, the study can increase the amount of literature about music learning and the effect of media technologies on learning results and skills of young students in the context of music training centers in Hanoi, Vietnam. This is a contribution of the project in terms of increasing the amount of literature in the context of music training in Hanoi and other studies can make reference to the study to understand media technologies used in music training centers in Hanoi. Secondly, the study offers solutions for music training centers in Hanoi to increase learning results of young students and teaching results of teachers in the future. This is a contribution of the study to music training centers in Hanoi. Lastly, the study can help potential investors who want to open music training centers in Hanoi to use suitable media technologies in the process of teaching students.

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APPENDICES

APPENDIX 1: INTERVIEW PANEL

This interview is to collect information serving the analysis of technological implications in music classes. The research is conducted by Ngoc Xuan Nguyen in July 2018.

Participant information:

Name:

Class:

School:

Course:

Time of interview:

Interview with teachers (Phỏng vấn giáo viên)

Question 1: Do you integrate any kinds of technologies in your class? If yes, what are they?

Câu hỏi 1: Anh/Chị có đang ứng dụng loại hình công nghệ nào vào lớp học của mình không ạ? Nếu có, xin anh /chị hãy mô tả chi tiết ứng dụng đó.

Question 2: What areas of music teaching do you think are technological driven (Instrumental/vocal techniques/choral methods)? Can you please describe how technologies influence such areas?

Câu hỏi 2: Theo anh chị, lĩnh vực giảng dạy nào đang chịu ảnh hưởng của công nghệ (học nhạc cụ/ kỹ thuật thanh nhạc/ phương pháp hợp xướng)? Xin Anh/ chị có thể mô tả chi tiết ảnh hưởng của công nghệ lên lĩnh vực đó.

Question 3: To what extent do you find technology support your job and boost up the performance of the students?

Câu hỏi 3: Theo anh chị công nghệ thực sự hỗ trợ công việc của anh chị cũng như nâng cao hiệu quả học tập của học viên như thế nào ạ?

Question 4: Could you please describe the best and the worst experiences with technologies that you underwent while teaching?

Câu hỏi 4: Hãy mô tả trải nghiệm tốt và xấu nhất với công nghệ khi anh chị giảng dạy âm nhạc.

Interview with students (Phỏng vấn học viên)

Question 1: Have you experienced learning music with technologies? If yes, what are they?

Câu hỏi 1: Em đã học nhạc với phần mềm hay Internet hoặc các ứng dụng công nghệ khác bao giờ chưa? Em hãy mô tả trải nghiệm của mình.

Question 2: What do you think about such experience compared with traditional way of studying?

Câu hỏi 2: Em cảm thấy như thế nào về trải nghiệm của mình so với cách học truyền thống không có ứng dụng công nghệ?

Interview with parents (Phỏng vấn bố mẹ)

Question 1: Are you favor of technological driven trend in music education? Do you want your children to take part in classes with technological implications? Please explain with details.

Câu hỏi 1: Anh/Chị có ủng hộ xu hướng giảng dạy và học tập âm nhạc với các ứng dụng công nghệ không? Anh/Chị có muốn cho bé tham gia vào các lớp học có ứng dụng công nghệ không? Và vì sao?

Question 2: If yes, how will you support their learning with technology?

Câu hỏi 2: Nếu có, anh /chị sẽ hỗ trợ việc học tập với công nghệ của con như thế nào?

APPENDIX 2: ANSWER SAMPLE

Participant information:

Name: Huynh Thu Trang

Class: 5

School: Dong Da

Course:

Time of interview: 2 July 2018

Interview with teachers

Question 1: Yes. We are using the soft-ware installed by the Government.

Question 2: The Instrumental is easier for students to understand.

Question 3: In my classes, the technologies are not usually applied. I do not find it more effective than the traditional method.

Question 4: It takes me a lot of time to prepare the program in the new method.

Participant information:

Name: Do Thi My Anh

Class: 4A

School: Yen Hoa

Course:

Time of interview: 3 July 2018

Interview with students

Question 1: Yes. The teachers use videos from Youtube in my classes.

Question 2: I find it more interesting to study. I like watching the videos and still understand the lessons.

Participant information:

Name: Phung Tuan Anh

Class of daughter: 3

School: VinSchool

Course:

Time of interview: 3 July 2018

Interview with parents

Question 1: I prefer the new trend of applying technologies in teaching music. We choose Vinschool because they are the most modern and innovative pioneer in education in Vietnam so they can provide our children the best teaching.

Question 2: We also facilitate our children the required learning materials at home such as internet or offline program designed by schools.